

CLAIMS

What is claimed is:

1. An apparatus, comprising:
a printed circuit board having a mounting hole formed therethrough;
and
a ferrule having a body with a channel formed therethrough from a first end of the body having a capture extension, to a second end of the body having a soldering extension that is used to solder the ferrule to the printed circuit board at a location where the channel formed through the ferrule and the mounting hole formed through the printed circuit board align.
2. The apparatus of claim 1, wherein the ferrule is substantially cylindrical in shape.
3. The apparatus of claim 1, wherein the soldering extension is a solder flange surrounding the channel formed through the ferrule at the second end, and providing a soldering surface.
4. The apparatus of claim 1, wherein the capture extension is used to hold a screw protruding through the channel formed through the ferrule captive to the ferrule.
5. The apparatus of claim 4, wherein the capture extension is a capture flange surrounding the channel formed through the ferrule at the first end.

6. The apparatus of claim 4, wherein the screw is comprised of a head installed within an overmold having at least one extension that engages the capture extension, and that cooperates with the capture extension to hold the screw captive to the ferrule.
7. The apparatus of claim 4, wherein the ferrule is used in cooperation with the screw protruding through both the channel formed through the ferrule and the mounting hole formed through the printed circuit board to mount the printed circuit board.
- 8.. The apparatus of claim 7, wherein a spring is positioned within the channel formed through the ferrule to bias the screw into a predetermined position when the screw is not being used to mount the printed circuit board.
9. An apparatus, comprising:
a ferrule having a body with a channel formed therethrough from a first end of the body having a capture extension, to a second end of the body having a soldering extension; and
a screw protruding through the channel formed through the ferrule and held captive to the ferrule by the capture extension.
10. The apparatus of claim 9, wherein the ferrule is substantially cylindrical in shape.
11. The apparatus of claim 9, wherein the capture extension is a capture flange surrounding the channel formed through the ferrule at the first end.

12. The apparatus of claim 9, wherein the screw is comprised of a head installed within an overmold having at least one extension that engages the capture extension, and that cooperates with the capture extension to hold the screw captive to the ferrule.
13. The apparatus of claim 9, wherein the soldering extension is used to solder the ferrule to the surface of a printed circuit board at a location where the channel formed through the ferrule aligns with a mounting hole formed through the printed circuit board.
14. The apparatus of claim 13, wherein the soldering extension is a solder flange surrounding the channel formed through the ferrule at the second end, and providing a soldering surface.
15. The apparatus of claim 13, wherein the ferrule is used in cooperation with the screw protruding through both the channel formed through the ferrule and the mounting hole formed through the printed circuit board to mount the printed circuit board.
16. The apparatus of claim 15, wherein a spring is positioned within the channel formed through the ferrule to bias the screw into a predetermined position when the screw is not being used to mount the printed circuit board.
17. A method comprising:
soldering a ferrule, having a body with a channel formed therethrough from a first end of the body having a capture extension to a second end of the body having a soldering extension, to a printed circuit board at a location

where the channel formed through the ferrule aligns with a mounting hole formed through the printed circuit board;

inserting a screw through the channel formed through the ferrule; and
using the capture extension to hold the screw captive to the ferrule.

18. The method of claim 17, wherein soldering the ferrule comprises using a surface mount populating technique to solder the soldering extension to the printed circuit board.

19. The method of claim 18, wherein the soldering extension is a solder flange surrounding the channel formed through the ferrule at the second end, and providing a soldering surface.

20. The method of claim 17, further comprising using the screw protruding through both the channel formed through the ferrule and the mounting hole formed through the printed circuit board to mount the printed circuit board.

21. The method of claim 20, further comprising positioning a spring within the channel formed through the ferrule to bias the screw into a predetermined position when the screw is not being used to mount the printed circuit board.

22. The method of claim 17, wherein the screw is comprised of a head installed within an overmold having at least one extension that engages the capture extension, and that cooperates with the capture extension to hold the screw captive to the ferrule.